

Claims

1. A method for washing a solid substrate on which a hybridization reaction has been completed using ultrasonic wave, including 1) placing the solid substrate in a container having a washing solution; 2) generating certain strength of ultrasound with an ultrasonic wave generator and transmitting the ultrasound into the washing solution, wherein the washing of the solid substrate is facilitated by cavitation effect in the washing solution produced by the ultrasound.
2. The method of claim 1, wherein the power of the ultrasonic wave generator is in a range of about 0.1 W to about 200 W.
3. The method of claim 1, wherein the ultrasonic wave frequency generated by the ultrasonic wave generator is in a range of about 20 kHz to about 100 MHz.
4. The method of claim 1, wherein the mode of generating ultrasonic wave by the ultrasonic wave generator is continuous or intermittent.
5. A device for washing a hybridized solid substrate according to the method of claim 1, comprising a container having a washing solution and a hybridized solid substrate placed in the solution, wherein at least one ultrasonic resonance component is placed upon, below, or around the hybridized solid substrate, and wherein the ultrasonic resonance component is connected with a resonance circuit.
6. The device of claim 6, wherein the resonance component is in direct or indirect contact with the washing solution.